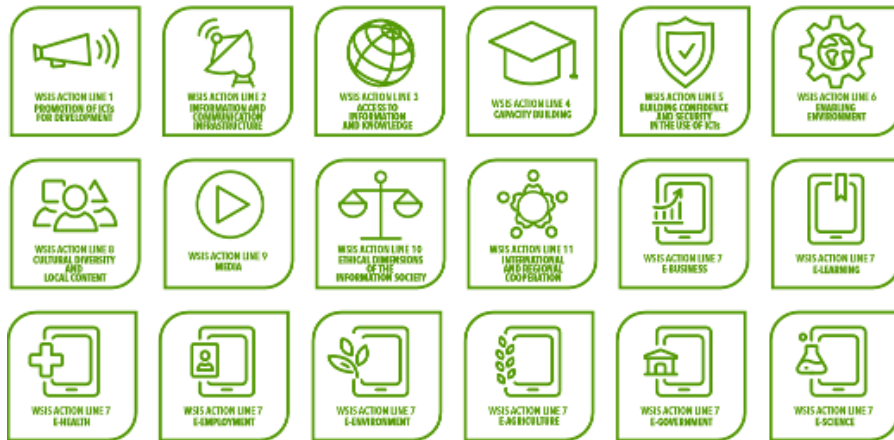




# WSIS Action Lines

***Sustainable and resilient recovery from the COVID-19 pandemic that promotes the economic, social and environmental dimensions of sustainable development: building an inclusive and effective path for the achievement of the 2030 Agenda in the context of the decade of action and delivery for sustainable development***



UNDESA



World Health Organization



International Trade Centre



UPU UNIVERSAL POSTAL UNION



World Meteorological Organisation



UNEP



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**WSIS Action Lines – C1: The role of public governance authorities and all stakeholders in the promotion of ICTs for development, C7: ICT Applications: E-government, C11: International and regional cooperation  
Lead Facilitator: UN DESA**

**WSIS Action Line – C2: Information and communication infrastructure**  
**Lead Facilitator: ITU**

**WSIS Action Line – C3: Access to information and knowledge**  
**Lead Facilitator: UNESCO**

The COVID-19 pandemic has been accompanied by a viral and life threatening ‘disinfodemic’ impeding access to trustworthy sources of information. Disinformation works directly against the Sustainable Development target 16.10 to “Ensure public access to information and protect fundamental freedoms.” Access to verifiable, reliable information makes the right to freedom of expression meaningful.

Early in the pandemic, UNESCO, in partnership with the Innovation for Policy Foundation (i4Policy), launched the [#DontGoViral](#) online campaign in Africa, inviting artists to amplify life-saving information to combat the COVID-19 pandemic among fans and followers, and to engage with cultural and creative industries in awareness-raising. The campaign addressed an urgent need to mitigate the spread of COVID-19 on the African Continent through culturally relevant and open-licensed information in local African languages. Partnerships were established with both African media outlets and global outlets, notably the BBC World Service and France 24. UNESCO is also actively supporting artists to reach communities most at risk including offline. In three months, the [#DontGoViral](#) campaign reached over 220 million people across the African Continent.

UNESCO also addressed the policy challenges of online disinformation, including through the publication of [two UNESCO policy briefs on the COVID-19 Disinfodemic](#) that offer policy recommendations and critical insights into the ongoing and rampant COVID-19-related health disinformation. A comprehensive, global report on disinformation policy was commissioned by the ITU/UNESCO Broadband Commission for Sustainable Development, entitled [Balancing Act: Countering Digital Disinformation while Respecting Freedom of Expression](#). The report, co-chaired by UNESCO and Dr Hessa Al-Jaber of Qatar, was endorsed by the Commission membership in September 2020 and publicized across more than a dozen webinars.

UNESCO, with support from the European Union, launched a global project to strengthen the resilience of states in the face of the COVID-19 pandemic. The project is helping societies address the challenges of false information about the coronavirus. The [“#CoronavirusFacts: Addressing the ‘Disinfodemic’ on COVID-19 in conflict-prone environments”](#) includes resource hubs in several languages.

Under the theme “Resisting Disinfodemic: Media and Information Literacy (MIL) for Everyone and by Everyone”, [Global MIL Week 2020](#) was organized from 24-30 October 2021 to respond to the increasing demand for MIL worldwide and shared interest of all stakeholders in promoting

competencies to critically interact with information, media and technology. The 2020 Global MIL Week also underlined the pivotal role of MIL in fostering quality journalism, access to information and freedom of expression, in the face of rising disinformation and mistrust exacerbated by the COVID-19 pandemic.

Hosted by Prime Minister Ana Brnabić of the Republic of Serbia and international partners, the week (23-29 April 2021) featured the launch of updated MIL curriculum “[Think critically, Click Wisely: Media and Information Literate Citizens](#)”. The new edition of UNESCO’s educational framework for MIL takes on board recent developments in the social and digital domains, including artificial intelligence, privacy issues, the increasing importance of social competencies such as digital citizenship, education for sustainable development, cultural literacy and intercultural understanding, science literacy and the exponential rise in disinformation and online hate speech. The new edition reflects changes affecting all media, updating UNESCO’s first international publication on media and information literacy, released in 2011.

UNESCO organized the 2020 International Day for Universal Access to Information (IDUAI) with a focus on the right to information in times of crisis and on the advantages of having constitutional, statutory and/or policy guarantees for public access to information to save lives, build trust and help the formulation of sustainable policies through and beyond the COVID-19 crisis. In observance of the IDUAI 2020, the UNESCO Information For All Programme (IFAP) Working Group on Information Accessibility (WGIA) hosted a global online event on inclusive Artificial Intelligence with topics addressing information accessibility. In recognition of the significance of access to information, the 74th UN General Assembly proclaimed 28 September as the International Day for Universal Access to Information (A/RES/74/5) at the UN level in 2019.

**WSIS Action Line – C4: Capacity Building**  
**Lead Facilitator: ITU**

**WSIS Action Line – C5: Building confidence and security in the use of ICTs**  
**Lead Facilitator: ITU**

International Telecommunication Union (ITU), the specialized UN agency for information and communication technologies (ICT), is the facilitator for Action Line C5 of the World Summit on the Information Society (WSIS).

In this capacity, ITU brings different stakeholders together to forge meaningful partnerships to help countries address the risks associated with digital technologies. This includes supporting cross-sector collaboration among all stakeholders by leveraging its wide membership of 193 governments as well as some 900 sector members from industry, academia, other international and regional organizations for this purpose.

Building trust and confidence in new and existing ICT paradigms is crucial to advance sustainable development and ensure that the world benefits from the digital economy. This holds even more true as the world combats the COVID-19 pandemic.

Recognizing the urgent need for international cooperation to address the critical challenges posed by cybersecurity to the world community, ITU provides a platform for global dialogue that reflects the rapidly changing nature of today's ICT ecosystem.

Over the past year, ITU Study Groups continued to publish standards (ITU-T Recommendations and Supplements) in a bid to facilitate more secure network infrastructure, services and applications. ITU has also conducted technical assessments to evaluate the preparedness for the [establishment of Computer Incident Response Teams \(CIRTs\)](#) in more than 80 countries and is taking the necessary follow-up actions to assist the Member States in implementation. Till date, ITU has organized 29 [CyberDrills](#) involving more than 100 countries.

Currently, the process to update [The Guide to Developing a National Cybersecurity Strategy](#) (NCS) is underway and expected to end in October 2021, with more than 20 organizations contributing to the update. Through the [ITU Academy](#), the ITU and CoE continue to deliver training activities and workshops in various areas of the cybersecurity domain.

To address cybersecurity challenges during the COVID-19 pandemic and to [support Member States' health infrastructure with timely information on cyber threats](#), the ITU members have provided access to their services for ITU Member States.

The fourth version of the [ITU Global Cybersecurity Index](#) (GCI) will be released in 2021. To promote the involvement of young people in the field of cybersecurity and to address the field's worldwide workforce shortage, ITU will be launching the Youth4Cyber initiative. ITU is also finalizing the plan to launch the Women in Cyber Mentorship Programme targeted at building capacity of women junior professionals wishing to enter or thrive in the field of cybersecurity.



Looking forward, with the rise of new and emerging technologies and the opportunities and challenges that they pose for cybersecurity, several ITU Focus Groups have increasingly been working with all stakeholders to delve into the security-related aspects of technologies such as Artificial Intelligence, Internet of Things, Quantum Information Technologies and so on, including the [\*Focus Group on Artificial Intelligence for Health \(FG AI4H\)\*](#) with WHO.

Broadening and deepening cooperation among governments, the private sector and other stakeholders is needed for a reliable, interoperable, and secure ICT environment. In light of this, ITU launched the [\*Global Cybersecurity Agenda \(GCA\)\*](#) in 2008 as a framework for international cooperation in enhancing the confidence and security in the information society. Over the past two years, a review exercise of the GCA has taken place and draft guidelines on the utilization of the framework are being developed through an open consultation process involving all WSIS stakeholders.

At this year's [\*WSIS Forum 2021\*](#), given the importance of the issue, ITU organized a Cybersecurity Track to engage all stakeholders in meaningful dialogue aimed at advancing trust and building confidence and security in the use of ICTs. In this Track, various sessions have been organized by WSIS stakeholders as well as ITU on security. Given the cross-cutting nature of the issue, alongside this Track, the other WSIS Forum tracks - such as those on Emerging Technologies for Sustainable Development, Older Persons, and Youth – have also tackled the issue of cybersecurity.

ICTs hold the potential to drive progress across all the 17 Sustainable Development Goals (SDGs). However, a universally available, open, secure and trustworthy ICT ecosystem is essential to enable them to deliver on this promise. Building trust in cyberspace, and strengthening access, security and confidence, will help drive progress in this SDG Decade of Action towards achieving the 2030 Agenda for Sustainable Development.

**WSIS Action Line – C6: Enabling Environment**  
**Lead Facilitator: ITU**

The COVID-19 pandemic has underscored the importance of connectivity and has demonstrated that connecting every person is more important than ever before, but also highlights important digital divides within and between countries:

- 3.6 billion people still have no connectivity at all
- The proportion of women using the Internet globally is 48% compared to 58% of men. Women’s Internet use in developing countries is falling behind.
- Affordability and lack of digital skills remain some of the key barriers to the uptake and effective use of the Internet, especially in the world’s least developed countries.

Globally, the ICT industry has proved to be integral in reducing the negative impacts of the pandemic. An enormous range of social and economic activities have shifted from face-to-face to online in a remarkably short period of time. Unfortunately, this huge shift has only been possible for those who are connected. This highlights the urgent need to address the global digital divide and provide accessible and affordable connectivity to all on social, economic, and egalitarian grounds.

Leveraging ICTs and ensuring efficiency, safety, and security will be key components of socio-economic recovery, and will be vital in accelerating progress towards the Sustainable Development Goals (SDGs). People and communities that are connected, have affordable access, and digital skills are empowered. They can access information, online health, education services, and life-saving disaster warnings. They can pay for goods and services via mobile phones, stay in touch with loved ones, increase productivity or perform better-paid jobs that require digital skills.

With resilient, affordable and safe ICT infrastructure and services, supported by digital literacy and skills, individuals and businesses can participate/contribute to the digital economy. This, in turn, allows countries to increase their overall economic well-being and competitiveness.

Today’s unprecedented crisis calls for unprecedented cooperation. Digital connectivity and digital inclusion must be a priority for all governments as to provide affordable access to information technologies. More than ever, there is an urgent need to create an enabling ICT policy and regulatory environment that can guarantee access, connectivity and use for all in a post COVID world.

As the world adjusts to the new normal created by the COVID-19 pandemic, ITU is working to mobilize action around the call to ‘build back better’. As the United Nations specialized agency for information and communication technologies, ITU and its stakeholders are more committed than ever to ensuring that people everywhere benefit from the transformative potential of ICTs, including by fostering and enabling environment for ICT development (AL C6).

Since the pandemic began to spread internationally, ITU has been working even more closely with members from government and industry to convey this urgent call for action, and implement enabling environments to build back better, including:

- In 2020, ITU launched the Global Network Resiliency Platform (REG4COVID) to help countries and their regulatory communities share best practices and solutions during the

pandemic. The [REG4COVID interactive data dashboard](#) gives access to current and reliable country-specific official information on ICT policy and regulatory initiatives submitted directly to ITU by the ICT policy and regulatory community. The second phase of the [ITU REG4COVID Platform](#) initiative focusses on “preparing the future”, with country case studies and a detailed assessment study focusing on the plans prepared and adopted by countries for the post-crisis situation in terms of ICT policies and regulations.

- ITU launched Emergency Communications Guidelines to help policy makers formulate effective telecom responses in the wake of emergencies and disasters.
- ITU provided the AI for Good platform to engage AI experts globally to share their ideas on AI for health and to formulate concrete actions.
- The Broadband Commission for Sustainable Development quickly convened online to develop an Agenda for Action for Faster and Better Recovery, with Commissioners and their organizations working together to compile and disseminate a repository of tangible actions based on the three pillars of resilient connectivity, affordable access, and safe use of online services for informed and educated societies.
- While addressing the immediate needs during COVID-19, the Joint Digital Development Action Plan by the ITU/GSMA/World Bank/WEF, called for a “new urgency” to address the digital inclusion agenda of governments worldwide. The Call for Action focused on immediate actions to promote network resilience as well as to ensure access and affordability of digital services.
- Within the framework of the UN75 Global Governance Forum, ITU convened the Partnership Dialogue for Connectivity, where we agreed concrete actions to Accelerate Digital Connectivity in the Wake of COVID-19.
- The ITU also held joint webinars with the office of UN Under Secretary-General and Special Advisor to the Secretary-General on Digital Cooperation to build a community to share actionable ideas, initiatives and solutions, with a view to accelerating discussions within the Expert Roundtables following-up on the recommendations of the [UN Secretary-General’s High-Level Panel on Digital Cooperation](#).
- ITU joined the Global Education Coalition led by UNESCO to ensure learning never stops for students and youth across the planet affected by school and university closures.
- We have built on existing partnerships like our work with the International Labor Organization on digital skills for youth, starting with young people in Africa.
- Giga (a collaboration initiative of ITU and UNICEF, and other willing partners) is currently working with 10 countries to connect over 86,000 schools and more than 25.8M students and teachers.
- We joined WHO, UNICEF, and global operators to deliver health messaging via mobile phones to billions still lacking an Internet connection.

All of these tools and partnerships show just how collaboration to foster an enabling environment for digital is key at the global, regional and national level, not only for the COVID pandemic, but also for future crises, we need collaboration between governments, operators, equipment manufacturers, investors, and vertical industries, including both large and small companies, to accelerate progress toward bridging the broadband divide.

**WSIS Action Lines – C7: ICT Applications: E-learning and E-science**  
**Lead Facilitator: UNESCO**

With more than 1.5 billion young people having been affected by school closures due to the COVID-19 pandemic, UNESCO launched the [Global Education Coalition](#) ([#LearningNeverStops](#)) which now brings together more than [175 members](#) from the UN family, civil society, academia and the private sector around three missions: the Global Skills Academy, Global Learning House and Global Teacher Campus.

As of the end of March 2021, the Global Skills Academy has helped 142,000 young people and adults to build skills for employability and resilience, with free online trainings, facilitated by the UNESCO network of Technical and Vocational Education and Training Centres (UNEVOC) in more than 160 Member States, with priority outreach to disadvantaged learners. The Global Teacher Campus has reached its 30,000 beneficiaries with ICT skills to ensure quality and inclusive remote, hybrid and in-presence teaching and learning models. The Global Learning House provides quality, free online and offline lessons and tutoring to learners to 149,000 beneficiaries, with a special focus on STEM.

Coalition members rally around three flagships: namely connectivity, teachers and gender, as well as support to specific causes including the educational recovery following the volcano explosion in Saint Vincent and the Grenadines in April 2021. All Coalition members are encouraged to pledge for the protection of learners' personal information, privacy and security. On 29 March 2021, UNESCO convened a virtual high-level [ministerial meeting](#), inviting 65 Ministers of Education to take stock of lessons learnt, the greatest risks facing education today and strategies to leave no learner behind.

As COVID-19 has revealed and exacerbated inequalities, UNESCO's 2020 [Global Education Monitoring Report](#) emphasizes the urgent need for improved inclusion in education. The [2020 GEM Report](#) is available in four languages and its Summary Report is available in 24 languages. The 2020 GEM Report [World Education Blog](#) engaged with over 200,000 visitors through its posts, including over 40,000 views both in April and May 2020 for its [COVID-19 and Education blog](#) series. Four GEM policy papers were produced: [Aid to education and COVID-19](#), [Impact of COVID-19 on cost of implementing SDG 4](#), [Preparing teachers for inclusion](#), and [Unlocking Financing for Equity in Education](#). Two new websites also have been launched: [Profiles Enhancing Education Reviews](#) (PEER) with 160 profiles on inclusion; and [Scoping Progress in Education \(SCOPE\)](#) with five stories supported by interactive visualizations to allow readers to follow key global education trends.

The online edition of the flagship annual UNESCO [Mobile Learning Week](#) was held from 12 to 14 October 2020 on the theme of “Beyond Disruption: Technology Enabled Learning Futures”. The week focused around ensuring effective national distance learning strategies in response to the Covid-19 pandemic and beyond.

As it concerns **e-science**, the COVID-19 pandemic, and specifically the response of a large segment of the scientific community, has brought significant attention to the Open Science movement and how it can accelerate the achievement of scientific solutions for many global challenge.

Early in the pandemic, in March 2020, UNESCO mobilized 78 Science Ministers and other senior representatives of science ministries from a total of 122 countries to promote Open Science and reinforced international cooperation. And again in October 2020, UNESCO, WHO and UNHCR made a joint appeal to open up science and boost scientific cooperation in response to the COVID-19.

In line with the standard-setting role of the Organization, UNESCO’s Member States will be considering for adoption a new international instrument in the form of a UNESCO Recommendation on Open Science at the 41<sup>st</sup> Session of UNESCO’s General Conference this year. The recommendation seeks to ensure that open science is harnessed to close ongoing gaps in science technology and innovation. From the normative perspective, the elaboration of this Recommendation builds upon the 2017 UNESCO Recommendation on Science and Scientific Researchers and the overall Strategy on UNESCO’s contribution to the promotion of Open Access to Scientific Information and Research, adopted by the General Conference in 2011.

To support Open Sciences at national levels, UNESCO built on existing partnerships with the Indian Statistical Institute (ISI), Bangalore (India), and the Redalyc (*Red de Revistas Científicas de America Latina y el Caribe, España y Portugal*) network of scientific journals in Latin America, the Caribbean, Spain and Portugal to develop [Covid-19 Universal Resource gateway](#) (CURE) as a comprehensive open solutions resource portal on for COVID-19 response. The portal uses an AI engine to harvest information on the whole life cycle of the pandemic from multiple sources, so that members of the scientific community and the general public do not need to sift through numerous sources to find relevant and accurate information on the virus.

UNESCO’s flagship YouthMobile coding programme supported SAP’s Africa Code Week. The 2019 event engaged 3.85 million young people, with 47% girls participation, with 39,000 teachers mobilized in 37 countries. UNESCO also organized the [CodeTheCurve](#) hackathon in April 2020 with teams from 26 countries – made up of members under age 25 - coding solutions to fight COVID-19, with support from American technology company IBM and the European software

business SAP. A team from Spain won the three-week coding challenge, developing a data model combining artificial intelligence and imaging technology to analyze chest X-rays of COVID-19 patients, to help doctors make faster, more informed decisions to treat severe coronavirus cases. UNESCO also organized the global HackingDisinfodemic through the Republic of Korea during the Global Media & Information Literacy Week; and the virtual CodeHack training for girls and women in Kenya.

**WSIS Action Line – C7: ICT Applications: E-health  
Lead Facilitator: WHO**

**WSIS Action Line – C7: ICT Applications: E-agriculture**  
**Lead Facilitator: FAO**

The global agri-food system continues to face considerable challenges in being able to provide enough food of adequate quality to feed an ever-growing, aging, and migrating population. Before the COVID-19 pandemic, hunger continued to increase. In 2019, almost 690 million people – or nearly one in ten people in the world – went hungry. The pandemic may push an additional 130 million people in the world into chronic hunger by the end of 2020. According to the World Bank’s estimates, the pandemic's economic impact could push about 100 million people into extreme poverty.

The world is also changing at a fast pace with the emergence of an array of technologies. Before the COVID-19 crisis, digital technologies were changing the global economy, and agri-food systems were part of that transformation, however, COVID-19, has also accelerated the trend. The immediate impact of COVID-19 has been on food supply chains, labour shortages, increased challenges for farmers to access local markets and information, logistics challenges and decreasing food imports for import dependent countries.

Therefore, at WSIS Forum 2021, FAO, together with ITU and Zhejiang University (ZJU) co-organized Action Line C7 E-Agriculture through a 1-hour virtual session to discuss [E-Commerce for Agriculture and Rural Development](#), an effective approach as COVID-19 response and resilience recovery.

During this session, the overview of the ‘**Digital Agriculture Report: Rural E-commerce: Experiences from China**’ was also presented and welcomed. The report shows how the development of rural e-commerce improves the efficiency and productivity of agricultural production, accelerates the transformation of agri-food systems and reduce poverty with concrete examples of China’s leading role in rural e-commerce.

A panel with experts from Africa, Asia, America and Europe discussed the rural e-commerce as one of key parts of digital agriculture, which has facilitated two-way circulation between urban and rural areas, contributing to resilient recovery in post-pandemic. Creating awareness and keeping the momentum to develop a rural e-commerce that is inclusive, and generates economic, social and environmental benefits for all, especially for small and family farmers.

As a result, 433 participants attending the session from all over the world proves that innovation, digitalization and entrepreneurship are key nowadays to resilient recovery from COVID-19 and can help transforming the agri-food systems sector for a sustainable future.

In order to help the world’s most vulnerable, prevent further crises, increase resilience to shocks, and accelerate the rebuilding and sustainable transformation of our food systems, FAO initiated comprehensive and holistic [COVID-19 Response and Recovery Programme](#) which is designed to proactively and sustainably address the socio-economic impacts of the pandemic. In line with the



UN approach to “build back better,” and in pursuit of the Sustainable Development Goals, it aims to mitigate the immediate impacts of the pandemic while strengthening the long-term resilience of food systems and livelihoods.

FAO identified **seven key areas** of action needed to ensure rapid and continued support to the most vulnerable while anticipating the secondary repercussions of the virus. a) Global humanitarian response plan; b) Data for decision-making; c) Economic inclusion and social protection to reduce poverty; c) Trade and food safety standards; d) Boosting smallholder resilience for recovery; e) Preventing the next zoonotic pandemic; f) Food systems transformation.

FAO also has implemented an array of [policy tools](#) to analyses and assess the impact of COVID-19 on food and agriculture, value chains, food prices, food security across the globe, including policy measures, policy response, food policy warnings, policy briefs, big data daily updates and crop calendars.

Furthermore, FAO has started innovative initiatives and programmes:

- [International Platform for Digital Food and Agriculture](#): a FAO-led initiative that will serve as a voluntary and inclusive multi-stakeholder mechanism to facilitate dialogue on how to strengthen the potential of digital technology applications in food and agriculture and how to address the related risks and challenges.
- **1000 Digital Villages**: an initiative that aims to promote the digital transformation of villages and small towns worldwide by identifying 1000 villages across the world to convert them into digital villages.
- [Hand-in-Hand initiative](#): an evidence-based, country-led and country-owned initiative of the FAO to accelerate agricultural transformation and sustainable rural development to eradicate poverty (SDG1) and end hunger and all forms of malnutrition (SDG2). [Hand-in-Hand Geospatial Platform](#) to serve as a digital public good to create interactive data maps to analyze trends and identify real-time gaps and opportunities to strengthen evidence-based decision-making in food and agriculture.
- [Digital Agriculture Forum and Global AgInnovation Challenge](#) to enhance knowledge exchange in digital agriculture and empower agripreneurs, especially women and youth, to harness digital tools and skills to tackle agri-food challenges. In addition, the development of **Digital Agriculture Bootcamp** will provide systematic capacity development in innovation and digital agriculture to FAO staff worldwide.

FAO continues the efforts in supporting the development of [National E-Agriculture Strategy](#) in Asia, Africa and Europe and facilitating [e-Agriculture Community of Practice](#) to offer capacity development, activities, news and collect good and promising practices in digital agriculture.

**WSIS Action Line – C7: ICT Applications: E-business**  
**Lead and Co-Facilitators: UNCTAD, ITC, and UPU**

Activities related to action line C7 (e-business) in 2020 were greatly coloured by the COVID-19 pandemic, which both helped to demonstrate the value of digital solutions for coping with various lockdown measures and travel restrictions, and highlighted the significant digital divides that still remain. Participating agencies conducted several surveys of consumers and businesses to assess the impact of the pandemic on e-commerce. Through various technical assistance work, they replied to requests from countries to build the capacity to leverage e-commerce and the digital economy for sustainable and inclusive development.

ITC continued its work to support SMEs in developing countries to engage in digital entrepreneurship, support women in digital trade, and leverage technology for trade facilitation. UNCTAD hosted multistakeholder discussions at its first virtual eWeek, with more than 2,000 participants from 134 countries. It also convened a series of eTrade for Women Masterclasses, completed several new eTrade Readiness Assessments and increased its focus on ensuring effective follow-up to the implementation of recommendations contained in the assessments. UPU continued its programmes to modernize and transform public postal infrastructure to support the unconnected and introduce new ICT enabled services at the national level that increase digital inclusion, financial inclusion, trade inclusion for citizens and micro, small and medium enterprises (MSMEs).

**Trends in eBusiness: the pandemic has increased the importance of digital trade, even in developing and least developed countries**

Global e-commerce has been estimated by UNCTAD to have reached \$26.7 trillion in 2019, up 4% from the previous year. There has also been rapid growth of trade in the digital economy. For example, exports of ICT services more than doubled from \$303 billion in 2010 to \$636 billion in 2019, and those of digitally deliverable services from \$1.87 trillion to \$3.19 trillion. The UNCTAD B2C E-commerce Index for 2020 confirmed the significant divides in terms of e-commerce readiness.

ITC surveyed 170 small businesses across 107 countries and found among other things that the most cited need was support in building a long term strategy to digitize their business more successfully. An UNCTAD-NetComm Suisse survey covering about 3,700 consumers in nine emerging and developed economies found that, due to COVID-19, more than half of the respondents now shopped online more frequently and relied more on the internet more for news, health-related information and digital entertainment. Consumers in emerging economies had made the greatest shift to online shopping.

**Global eTrade for all study of the impact of COVID-19 on e-commerce:**

Under the joint leadership of UNCTAD and ECLAC, a working group comprising several eTrade for all partners (ECA, ECE, ESCWA, ESCAP, ITC, CUTS International, UPU and E-Residency) published

in early 2021 an analysis and policy recommendations in 7 policy areas as a contribution to the broader agenda of “building-back better”.

### ***Examples of technical assistance and capacity-building***

- Despite the pandemic, the co-facilitators and its partners continued to support developing countries in the area of e-commerce and the digital economy. the *Global Trade Helpdesk* partners, led by ITC, UNCTAD and WTO, began the rollout of the new version of the Global Trade Helpdesk platform.
- Through the *FastTrackTech* initiative, as of Q3 2020, 953 digital entrepreneurs, including 689 youths and 280 women, had been equipped with managerial and technical skills, 120 tech startups selected, segmented and capacitated. A network of 15 partner tech hubs had been set up and engaged with as local multipliers across seven countries. The first business outcomes had also been recorded.
- To support the most advanced women entrepreneurs across six countries in Central America, ITC implemented one-on-one coaching with experts in various domains. These “elabs” demonstrated how advanced skills in website design and digital promotion can lead to higher sales. The recipients of this coaching are now in turn acting as mentors. Over eighteen months, ITC noticed since 2020 640 online orders from 18 countries, over 150,000 visits of webshops, eBay and Etsy stores, over 1,500 products listed on eBay, Etsy and websites and 15,000 new Instagram followers.
- Through the Refugee Employment and Skills Initiative (RESI) in Kenya, ITC, the Norwegian Refugee Council and partners Mastercard, Biolite and Total helps to connect local sales agents and wholesalers to larger suppliers based in Nairobi via an online application. During COVID, ITC adapted the training delivery to be online and to provide mentorship and follow up support via phone calls, text messages and WhatsApp calls.
- The ITC’s SME Trade Academy in 2020 accumulated over 140,000 course enrolments (50% more than in 2019), with a catalogue of 70 online courses, thereby contributing to SDG 4.
- ITC undertook audits of 150 SMEs’ websites in Bangladesh, Ghana, Kenya, Mexico, Nigeria, Senegal, Tunisia, Uganda, UAE, and Vietnam to improve their online visibility. A few coaches were assisted to build new business services and to apply their experience toward other SMEs.
- UNCTAD in collaboration with eTrade for all partners completed another seven eTrade Readiness Assessments of five LDCs (Bénin, Mali, Malawi, Niger and Tanzania) and for Côte d’Ivoire and Iraq. UNCTAD also launched new work aimed at accelerating the implementation of policy recommendations contained in the 27 assessments conducted since 2016 (see below).
- UNCTAD also continued to offer support for the development of e-commerce strategies notably in Botswana, Myanmar and Rwanda. It also committed to commence similar work in Bénin and Kenya in 2021.

- Some 48 women digital entrepreneurs from 17 countries across Southeast Asia and Africa participated in regional eTrade for Women Masterclasses in 2020. The initiative also paved the way for the building of eTrade for Women regional communities, which will enable women digital entrepreneurs to connect and rely on a powerful network of like-minded peers.
- UNCTAD updated its Manual for the Production of Statistics on the Digital Economy, which will serve as a basis for strengthening the capabilities of developing countries to measure e-commerce and the digital economy.
- The UNCTAD-led eTrade for all initiative offered a trusted platform to address the challenges brought forward by the COVID-19 pandemic on e-commerce, digital trade and development. A COVID repository has been developed, gathering all major publications by its partners on the impact and early mitigation strategies in the pandemic-period. Also, a series of events has been organized from February to May to discuss trends, impacts and policy recommendations to be taken into account when the world will enter the recovery period.
- During the COVID-19 pandemic, the UPU in cooperation with member countries, partners and stakeholders has undertaken a series of urgent measures to support Posts including the provision of operational and logistics information on network availability. The UPU has facilitated the distribution of over 700 messages between 140 countries related to measures taken to halt the spread of COVID-19, such as flight cancellations and social distancing.
- Assistance to Posts in the LDCs was provided by the UPU, including the provision of much-needed personal protective equipment, with 1.2 million masks provided to LDCs and SIDS.
- Cooperation between the UPU, ICAO, IATA, WCO and UNECE mobilised resources for logistics support for e-commerce during the pandemic, including the use of digital trade solutions to facilitated paperless trade. The UPU, the Organization for Cooperation of Railways (OSJD), and the International Coordinating Council on Trans-Eurasian Transportation (CCTT) cooperated to keep the e-commerce items moving via rail networks across Europe and Asia, with more than 20 mail-only block trains transporting in excess of 8,000 tons of mail and parcels for e-commerce.
- The UPU provided cybersecurity training to over 14 member states to enhance their cyberprotection during the pandemic, and trained regulators to accelerate the adoption of cybersecurity policies for the postal network.

### **Innovations and Future Initiatives**

The surge in demand for digital trade, ecommerce and digitization – eBusiness – has accelerated the need for and priority given to related initiatives, including:

**Fast-tracking the implementation of eTrade Readiness Assessment recommendations:** many developing countries and LDCs announce a keen interest in identifying challenges to the development of e-commerce in their economies and undertaking reforms to address these challenges.

In 2021, UNCTAD expects to begin supporting the development of **regional e-commerce strategies**, starting with the Economic Community of West African States (ECOWAS).

The first ever Asia eCommerce Week is scheduled to take place from 17-21 October 2021 in Abu-Dhabi (UAE). This will be one of the main global forums to discuss post-COVID 19 policy responses related to e-commerce, the digital economy and development.

**WSIS Action Line – C7: ICT Applications: E-environment  
Lead and Co-Facilitators: WMO, UNEP, and ITU**

**WSIS Action Line – C7: ICT Applications: E-employment  
Lead Facilitator: ILO**

**WSIS Action Line – C8: Cultural diversity and identity, linguistic diversity and local content**  
**Lead Facilitator: UNESCO**

ICTs play an essential role as vectors for the creation, dissemination and access to cultural expressions, especially in the light of the COVID-19 pandemic which has accelerated the migration of cultural creation and consumption to digital platforms, while raising new challenges for the diversity of supply and demand. UNESCO mainstreams ICTs in its Culture programme, particularly in the protection and promotion of cultural heritage and the diversity of cultural expressions, in line with Action Line C8.

Although the commitment of the UN to the rights of indigenous peoples and their inclusion are implied in all aspects of the SDGs, and are also well articulated in other international documents, we have seen that this does not automatically result in their inclusion in either general or targeted efforts to meet SDGs or optimal integration into the national information and technology-related policies, practices and processes.

Existing development mechanisms do not adequately reflect the needs of indigenous language users, who are at risk of being left behind in the digital divide or even excluded. Despite technological progress, many indigenous peoples experience all sorts of barriers to access information in their own languages in cyberspace, access knowledge through websites and e-content, use mobile phones and applications, television, personal computers, etc.

Starting next year, the United Nations system has declared 2022 to 2032 the International Decade of Indigenous Languages. In 2020, the Los Pinos Declaration (Mexico City, February 2020) presented key recommendations including in the area of “Digital empowerment, language technology and indigenous media” for the elaboration of the Global Action Plan for the International Decade of Indigenous Languages (2022-2032).

UNESCO has continued to intensify its efforts to ensure access to reliable and accurate health information in languages understood by indigenous peoples, by compiling relevant resources in cooperation with Member States, other UN Agencies and partners, on the dedicated page “[COVID-19 pandemic: Language Matters](#)”. Furthermore, a UNESCO bulletin focusing on the impact of the current crisis on indigenous peoples was launched on the occasion of the International Day of the World’s Indigenous Peoples (9 August). It includes information concerning targeted actions taken by UNESCO in different areas, as well as good practices for the future.



UNESCO contributed as well to the 2020 Report of the Best Practice Forum on Local Content on “Local and indigenous content in the digital space: Protection, preservation and sustainability of creative work and traditional knowledge”, focusing on good practices and case studies in the area of multilingualism, linguistic diversity and indigenous languages.

Amidst the global COVID-19 pandemic, an Online Meeting of the Ministers of Culture, organized by UNESCO on 22 April 2020, brought together more than 130 Ministers and Vice-Ministers of Culture to address the impact of the health crisis on the cultural sector, the steep increase in consumption of online cultural contents since the beginning of the COVID-19 pandemic, and the response of Member States in their resilience efforts.

Recent surveys and research reveal how ICTs have been applied to help share culture and data, and innovative practices have been highlighted in several reports and publications. For example UNESCO’s report: *Museums around the world in the face of Covid-19*; *UNESCO Creative Cities Response to COVID-19*; and *Culture in crisis: policy guide for a resilient creative sector*.

A weekly “Culture & COVID-19: Impact and Response Tracker” was launched in March 2020 providing an overview of the rapidly evolving situation caused by COVID-19. It revealed the impact of the health crisis on the unprecedented acceleration in the digitization of culture access. The renewed Tracker “Culture and Public Policy”, which is now issued on a monthly basis, continues to monitor and accentuate the impact of the digital transformation in Member States.

The [TechCul](#) initiative in the Asia-Pacific region brought together tech and culture leaders with startups and entrepreneurs to develop innovative digital solutions and win-win business models to address challenges faced by the culture and creative sector that were magnified by the COVID-19 pandemic. It aims to identify innovative tech and entrepreneurial solutions to tap into the power of digital transformation in order to rebound and pivot to new opportunities for the culture sector in the long term. The initiative kickstarted in December 2020 with an [Ideathon](#) to solicit a wide range of solutions that connect culture and technology. Potential solutions will be selected for further support through resources mobilized from private sector and development partners.

The [ResiliArt](#) movement was launched in response to the pandemic on 15 April 2020, World Art Day and has recently marked its one-year anniversary having completed over 270 ResiliArt debates and 110 countries with ongoing ResiliArt movements. It sheds light on the current state of creative industries amidst the crisis through an exclusive global discussion with key industry professionals while capturing experiences and voices of resilience from artists – both established and emerging – on social media. The devastation brought upon the entire culture value chain will

have a long-lasting impact on the creative economy. ResiliArt aims to ensure the continuity of conversations, data sharing, and advocacy efforts long after the pandemic subsides, in particular providing creative and artistic workers as well as museum and art gallery communities a space to express their concerns, needs and solutions.

To support implementation of the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003) UNESCO launched an [online survey](#) in April 2020 to document and exchange the different experiences of living heritage and how its safeguarding is affected in the context of the COVID-19 pandemic as well as the role it can play in maintaining social connectivity and solidarity during physical distancing and lockdown. Over 235 testimonies were received from communities in 78 countries, and these rich practices and experiences are available on a UNESCO web [platform](#).

As part of the [#ShareOurHeritage](#) campaign, UNESCO is working to promote access to culture – from World Heritage properties to living heritage practices – during this time of mass confinement. With the support of Google Arts & Culture, UNESCO launched an interactive online exhibition and virtual tour featuring dozens of World Heritage properties from across the globe. First-hand video accounts from World Heritage site managers, the caretakers of these outstanding places, were also provided to offer a unique glimpse into the impact of COVID-19 on World Heritage sites. Additionally, the closures of World Heritage sites due to the pandemic have been monitored and are represented online with statistics of countries whose sites are open, partially open or closed.

As part of efforts to protect underwater cultural heritage (2001 UNESCO Convention) and build national capacities of Member States in that regard, UNESCO elaborates online training tools and promotes their use by heritage institutions and professionals. The COVID-19 pandemic has also led to an acceleration of the digitization of training resources. Digital tools are also increasingly used in the virtualization of underwater archaeological sites, which are used for practical trainings. UNESCO is working with its associated [UNITWIN Network on Underwater Archaeology](#), which connects universities and professional training institutions working in the field of underwater archaeology, to develop digital training materials.

COVID-19 presents new challenges for parents and guardians of young children, many of whom are out of school. Yet confinement can also be an opportunity – for learning, creativity and discovery. To encourage this creativity, UNESCO, through the [Little Artists initiative](#), invited children between the ages of 6 and 12 to draw a UNESCO World Heritage site that matters to them and submit their artworks digitally. On World Day for Cultural Diversity for Dialogue and

Development (21 May), UNESCO presented the artworks of 572 children from 55 countries online.

The response to the impact of COVID-19 will shape future management and information systems for World Heritage sites and digital technology will play a key role in the transformation. From a sustainable tourism perspective this provides an opportunity to strengthen visitor management strategies for practitioners and the flow of data and information for business and consumers. For consumers, heritage interpretation is vital for the transmission of heritage values that underpin UNESCO's cultural conventions. UNESCO has initiated online training certification for tourist guides and craft makers for World Heritage in eleven properties in eight countries. This will complement the UNESCO Sustainable Tourism Pledge platform with the Expedia Group working and the hospitality industry and national tourism boards.

UNESCO launched the online *Report on Museums around the World in the face of COVID-19* available on the UNESCO Digital Library. The report presents an initial evaluation of the impact of COVID-19 in the museum sector with key trends of the world's museums, their response and capacity for resilience, and the challenges of accessing culture and collections, including through digital and virtual means. More than ten webinars were organized for museum professionals and the public to discuss and find solutions for the future of museums. This was in cooperation with partners, such as IBERMUSEUMS, the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), the Egyptian Ministry of Tourism and Antiquities (MoTA) and the International Institute for the Inclusive Museum.

**WSIS Action Line – C9: Media**  
**Lead Facilitator: UNESCO**

Free and professional media are now playing a critical role in the global fight against the COVID-19 pandemic. Since the beginning of this crisis, UNESCO has continuously reached out and engaged with journalism actors, governments, civil society, academia and other UN agencies.

Professional journalism delivering reliable information online helps societies to adapt and organize responses to the spread of COVID-19, share knowledge and experiences, and counter the increase of rumors and disinformation. At the same time, the spotlight on online disinformation and the COVID-19 crisis has highlighted the many crises that threaten the right to freely reported, independent, diverse and reliable information.

[World Press Freedom Day](#) (3 May) and [the International Day to End Impunity for Crimes against Journalists](#) (2 November) are commemorated each year by UNESCO as flagship UN events providing high levels of participation and visibility.

Participants at the [2021 World Press Freedom Day Global Conference](#) adopted the “[Windhoek + 30 Declaration](#)”, marking thirty years since the landmark meeting that brought forth the 1991 Windhoek Declaration on Free, Independent, and Pluralistic Press, which also led to the proclamation of 3 May as World Press Freedom Day.

Some 250 speakers and more than 3,000 virtual participants took part in the multi-day event on the theme of “Information as a Public Good.” Sessions addressed the impact on media of COVID-19 including emergency measures to support media, the safety of journalists, and remembrance of journalists lost during the pandemic.

Over the past fourteen years (2006-2019), close to 1,200 journalists have been killed for reporting the news and bringing information to the public. On average, this constitutes one death every four days. In nine out of ten cases the killers go unpunished. UNESCO closely monitors the impact of this crisis on media freedom, safety of journalists, and the fundamental right to access information. The United Nations General Assembly in resolution A/RES/68/163 proclaimed 2 November as the [International Day to End Impunity for Crimes against Journalists](#) since 2013. In 2020, UNESCO and the Kingdom of the Netherlands organized “Strengthening investigations and prosecutions to end impunity for crimes against journalists” (held 10 December) which presented guidelines for prosecutors on investigating and prosecuting crimes and attacks against journalists, developed in partnership with the International Association of Prosecutors.

In a context of unprecedented challenges for the media and digital technology sectors, UNESCO has compiled online a [resource center](#) of selected responses to COVID-19, funded by Norway,

the EU and the Multi-Donor Programme on Freedom of Expression and Safety of Journalists (MDP). This features a collection of examples of actions related to communication and information made available for the purpose of sharing and amplifying good practices, identifying priorities, facilitating partnerships, providing advice and technical assistance to governments and relevant national stakeholders, and fostering North-South, South-South, and triangular cooperation.

In response to the legal challenges brought on by exceptional measures and often restrictive legislation implemented by States in the context of the pandemic, UNESCO has issued guidelines on the role of judicial operators in the protection of the rights to freedom of expression, access to information, and privacy in relation with the COVID-19 pandemic. These guidelines, available in 9 languages, support the work of members of the judiciary and prosecution services in upholding the respect of the rule of law, freedom of expression and safety of journalists during and beyond the pandemic. They followed a series of webinars for the judiciary on the legal challenges to freedom of expression related to the pandemic.

“#CoronavirusFacts addressing the ‘disinfodemic’ on COVID-19 in conflict-prone environments” is an EU-funded UNESCO project that includes global components as well as regional and national activities across Africa, Latin America, Afghanistan and Iraq.

UNESCO and *Chequeado – LatamChequea*, an alliance of 35 fact-checking organisations, launched the resource hub PortalCheck.org to offer verified resources created by expert fact-checkers on how to combat COVID-19 mis/disinformation in Latin America and the Caribbean, through support of the European Union under the #CoronavirusFacts project. Over 3,000 people watched the digital lab launch event on 11 February and through working with regional influencers, the hub is garnering media attention across the region.

UNESCO works closely with partners to strengthen media’s and citizens’ resilience to disinformation and the impact of the COVID-19 crisis under other key projects such as together with a consortium of International NGOs on the project “COVID-19 response in Africa: Together for Reliable Information”, and as part of the World Health Organization’s COVID-19 Solidarity Response Fund under the project “#CoronavirusFacts: Addressing the infodemic by empowering journalists and citizens”.

UNESCO and the Knight Center for Journalism in the Americas at the University of Texas at Austin completed the Massive Open Online Course “[Disinformation & Fact-Checking in Times of COVID-19 in Latin America and the Caribbean](#)” facilitated by the Deputy Director of the International Fact Checking Network (IFCN) through funding from the European Union. Over 3,000 participants from 52 countries, including all Latin American nations, attended the four-week course held in Spanish, Portuguese and Guarani from 15 February to 14 March 2021 offering tools and

resources to journalists, communication workers, content creators and others who are at the forefront of countering disinformation related to the COVID-19 pandemic. The course has since been repurposed into self-directed courses, along with additional webinars as well as fact-checking courses for journalists.

UNESCO has also continued to raise awareness of the challenges faced by journalists and media workers during the COVID-19 crisis through the publication of the Issue Brief “Journalism, press freedom and COVID-19”, which highlights safety threats faced by journalists in the current global health context. UNESCO also launched around World Press Freedom Day 2020 a major awareness-raising campaign titled ‘FACTS’ to give prominence to the role of fact-based journalism in combatting the COVID-19 pandemic.

Under UNESCO’s EU-funded project Building Trust in Media in South East Europe and Turkey - Phase 2, the Council of Media Ethics of North Macedonia (CMEM) announced the winners of the ‘Best Journalistic Stories’ competition, awarding the most professional stories covering the COVID-19 pandemic.

**WSIS Action Line – C10: Ethical dimensions of the Information Society**  
**Lead Facilitator: UNESCO**

Promoting the ethical advancement of science and technology is one of the core functions of UNESCO. In recent years, UNESCO has applied this mandate to such frontier fields as genetic engineering and neuro technologies. Now, Artificial Intelligence (AI) is at the centre of discussions world-wide, and the impact of this technology will depend on the way humanity frames it and masters it.

To address the challenges and ensure the benefits, UNESCO's 193 Member States mandated the Organization to elaborate the first-ever global normative instrument in this area – the Recommendation on the Ethics of AI. To produce the first draft of the Recommendation, UNESCO's Director-General appointed an Ad Hoc Expert Group, composed of 24 experts – women and men from diverse cultural backgrounds and all geographical regions, leading scientists and professionals with extensive knowledge of the technological and ethical aspects of AI. The first draft of the Recommendation was elaborated using the feedback from inclusive and multidisciplinary consultation processes that have captured the views of the scientific communities, people of different cultural backgrounds and ethical perspectives, minority groups, civil society, government and the private sector. The 11 regional consultations were complemented by a global virtual consultation through a detailed questionnaire, which garnered more than 50,000 comments on the document from a diversity of stakeholders.

As with previous technological revolutions AI has the potential to transform the future for the better through new tools. Remarkably, AI generated some of the earliest alerts about the COVID-19 outbreak, even before it was confirmed, by routinely scanning hundreds or thousands of governmental and media data sources in multiple languages. This analytical capacity has also helped accelerate the discovery of the vaccine, and even understanding the protein structures. Self-learning algorithms and smart machines are playing an increasingly important role in our efforts to recover from the current crisis. Digital platforms and infrastructure have been broadened to keep our economies, our schools and our societies going.

However, the same tools bring downside risks and challenges. Negative impacts can emanate from deliberate actions, as well as side effects of poor design and impact of the surroundings of the system. Malicious use of AI is more evident, and it can threaten digital, physical and political security. However, unintended failures are also a threat with a long track-record. This includes embedded or self-learned biases in the development of algorithms. We have already experienced market crashes caused by intelligent trading software, accidents caused by self-driving cars and harm from chat-bots: which engaged in racist and hate speech. It is predicted that both the frequency and seriousness of such events will steadily increase as AI systems become more capable.

The outlined issues require clear understanding of the technologies, but more than anything a deep ethical reflection. It is clear that AI technologies as developed by humans are not value

neutral. This reflection needs to address the main challenges in the development of AI technologies also related to the risks of creating new forms of exclusion and inequalities, including gender, the issues of just distribution of benefits and risks, accountability, responsibility, impacts on employment and the future of work, human rights, security and risks of dual use. The COVID-19 pandemic has exemplified how AI technologies can help, but also how much we need a global normative framework that informs the way we use and deploy AI in an ethical manner that ensures full respect for and promotion of human rights and human dignity.

If adopted, the UNESCO Recommendation would provide concrete mechanisms, such as the Ethical Impact Assessment tool, Readiness Index and various capacity-building mechanisms to help countries evaluate benefits and risks of AI systems, put in place risk prevention, mitigation and monitoring measures, and to deploy various redress mechanisms for those who have been adversely affected by these new technologies. These elements make the Recommendation a potentially ground-breaking instrument in this fast-evolving field.

Therefore, the UNESCO way is pluralistic, multidisciplinary, multicultural and multi-stakeholder. Inclusion is at the core, and it is immensely important in the far-reaching technological developments in AI. The global nature of the Recommendation is essential in ensuring such inclusion.

Since 2015, UNESCO Member States have endorsed the concept of Internet Universality based upon the ROAM principles, a heuristic for:

- (i) human **R**ights-based
- (ii) **O**pen,
- (iii) **A**ccessible to all, and
- (iv) nurtured by **M**ulti-stakeholder participation.

UNESCO's Internet Universality Indicators have been developed as an internationally recognized research toolkit to be used by all countries and stakeholders on a voluntary basis. They allow UNESCO Member States and all interested stakeholders to operationalize the concept of 'Internet Universality' and help them to pinpoint gaps in adhering to these four fundamental ROAM principles and formulate policy recommendations to improve national digital policies and ecosystems.

UNESCO has been working with stakeholders from an increasing number of countries to implement national assessments of Internet development using the Indicators. Since then, the national assessments are progressing in 21 countries in Africa, Asia, the Arab Region, Latin America and Europe. At the national level, these indicators aim to assess achievement and gaps of Internet development and policies via an inclusive multi-stakeholder methodology. The national assessment process proves to be a holistic approach for individual countries to operationalize the ROAM principles and to achieve evidence-based policy reform and



improvement and serves an evidence-based approach to facilitate digital collaboration at regional and global levels.

Because AI and other new technologies have been evolving within the ecosystem of the Internet, the Internet Universality ROAM principles can be applied as a holistic framework for UNESCO and stakeholders to help shape the design, application, and governance of AI. Adherence to the ROAM principles among national stakeholders, including governments, companies, and civil society, can be measured through the ROAM-X indicators framework, comprising 303 indicators. It also includes 79 cross-cutting Indicators (category X) concerning gender and the needs of children and young people, sustainable development, trust and security, and legal and ethical aspects of the Internet. UNESCO is building a consolidated online platform and policy observatory to support optimization of data and deliver online tutorials/ help desks for stakeholders to research using UNESCO indicators and make intelligent use of data made available by the platform.

UNESCO is also responding to the policy challenges of addressing online disinformation and misinformation, including the life-threatening COVID-19-related 'disinfodemic' that is impeding access to trustworthy sources and reliable information. This is further reported under AL C3.